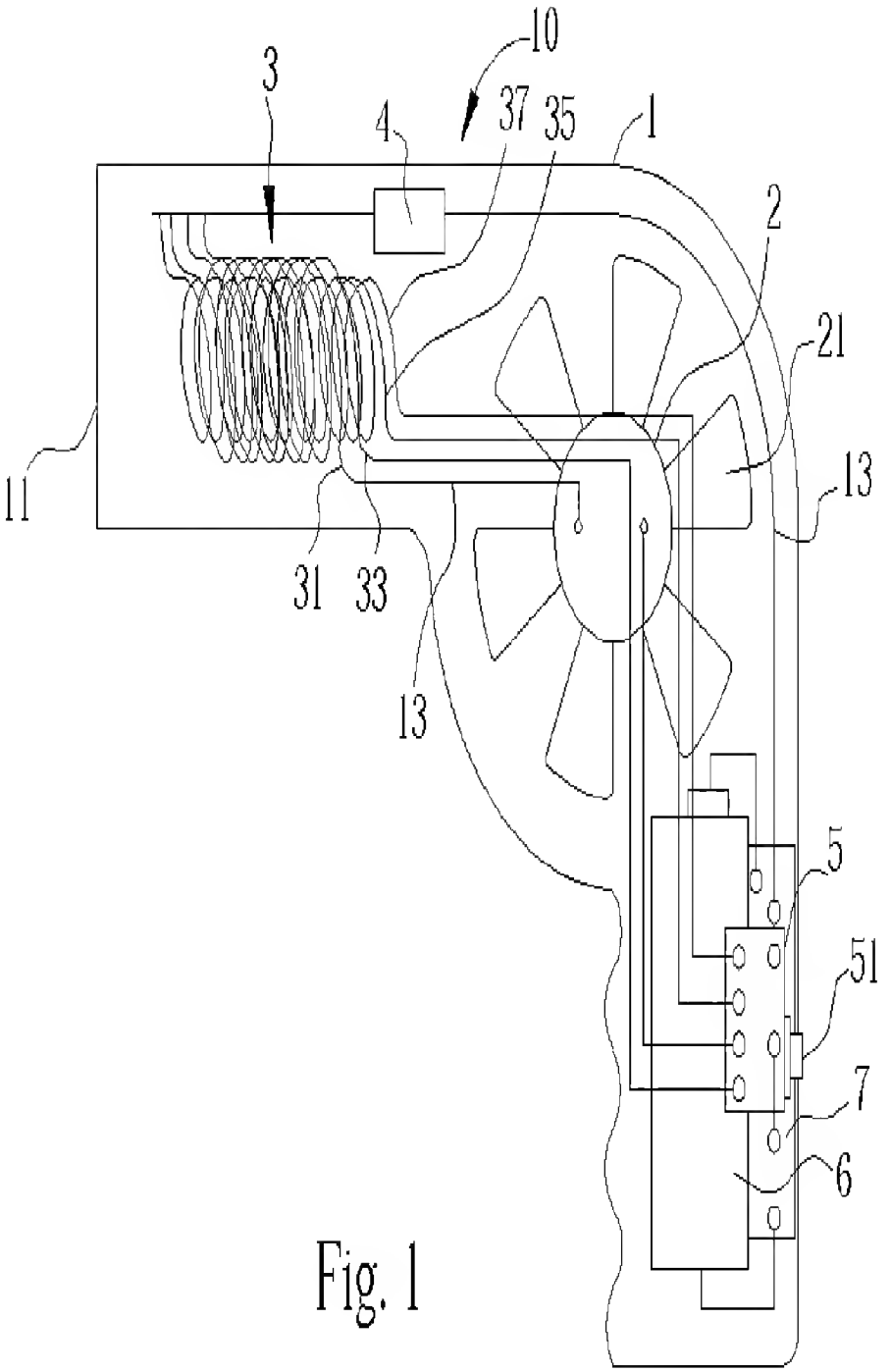

Fig. 1

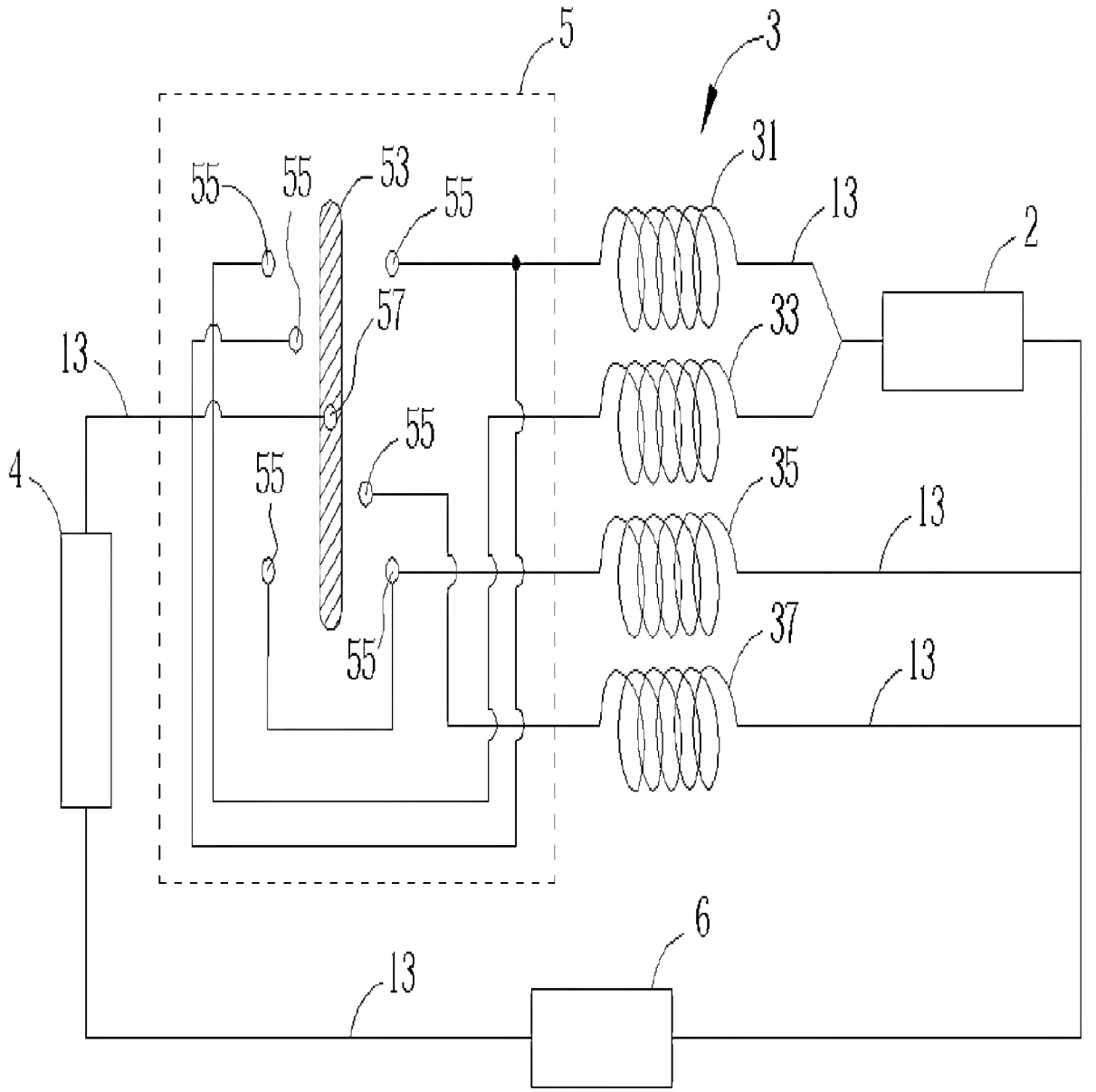

Fig. 2

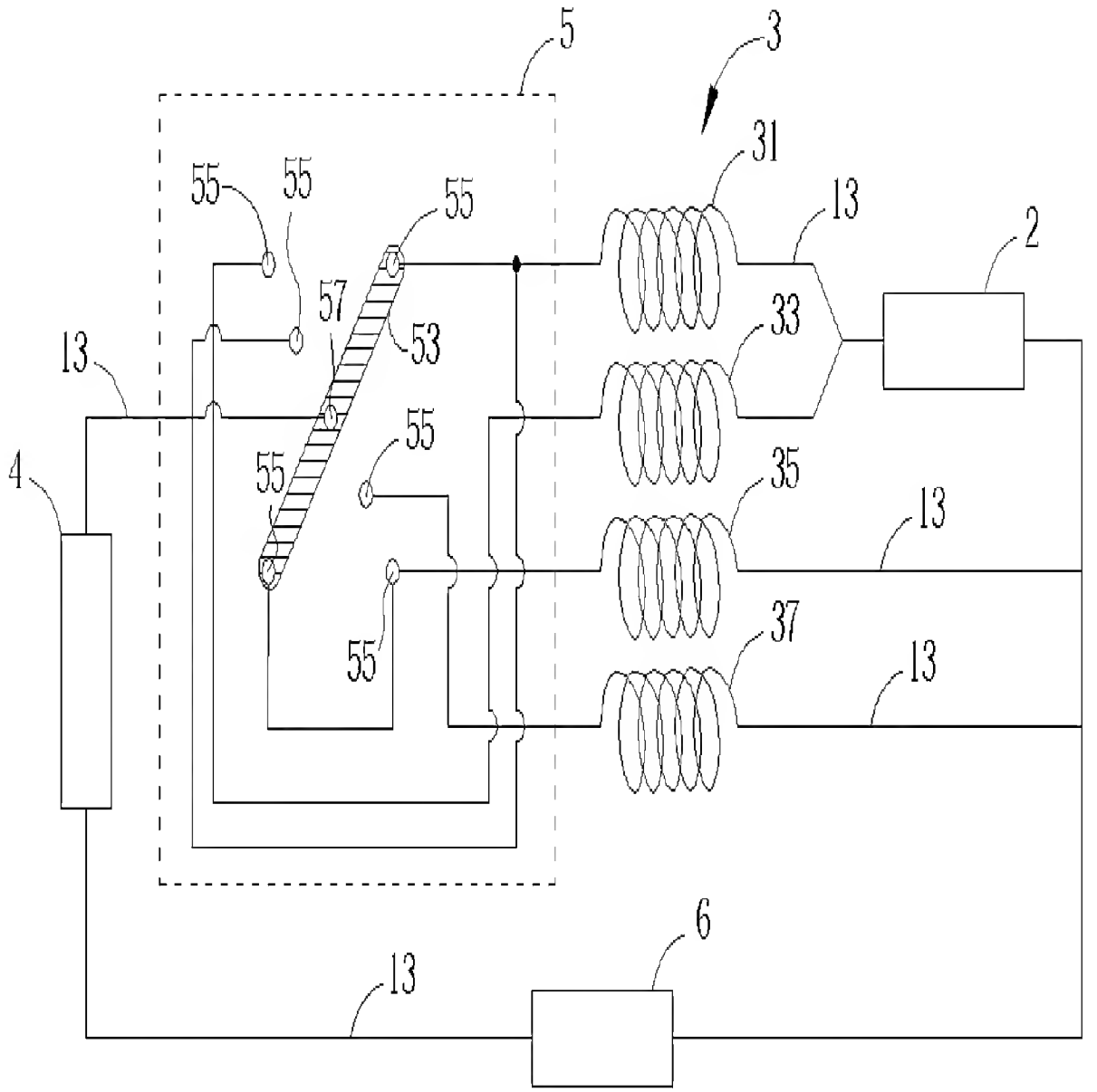

Fig. 3

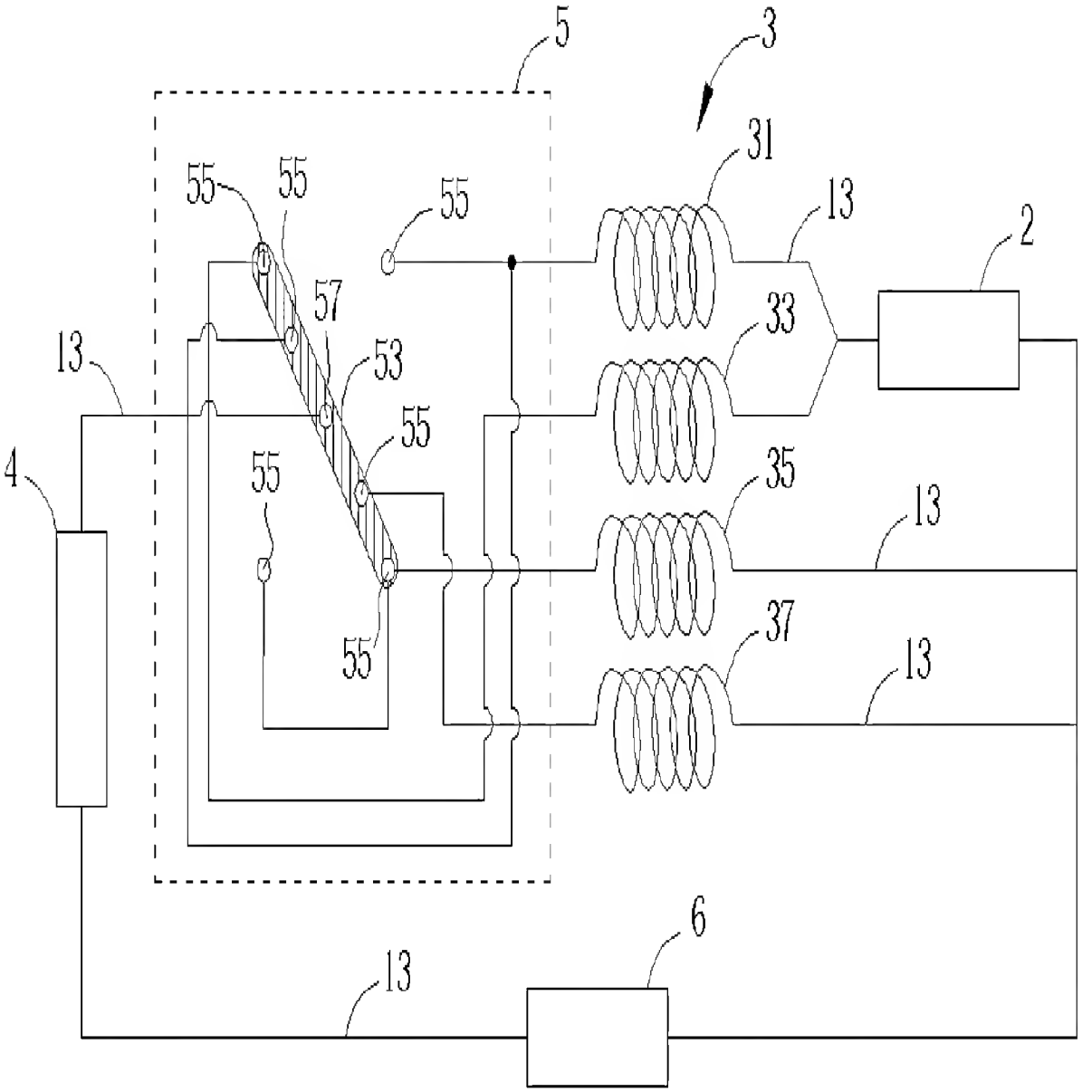

Fig. 4

Type I

(I-1)	R_M	R_1	R_3	Total
Resistance Ω =	4.00	4.00	1.00	0.89
Current DC I =	2.00	2.00	16.00	18.00
Voltage DC V =	8.00	8.00	16.00	16.00
Power DC W =	16.00	16.00	256.00	288.00

(I-2)	R_M	R_1	R_2	R_3	R_4	Total
Resistance Ω' =	4.00	4.00	2.86	1.00	1.00	0.46
Current DC I' =	2.82	1.18	1.64	16.00	16.00	34.82
Voltage DC V' =	11.29	4.71	4.71	16.00	16.00	16.00
Power DC W' =	32.00	5.55	7.76	256.00	256.00	557.31

$W'_M / W_M = 32.00/16.00 = 2$

$W'_{Total} / W_{Total} = 557.31/288.00 = 1.94$

Fig. 5

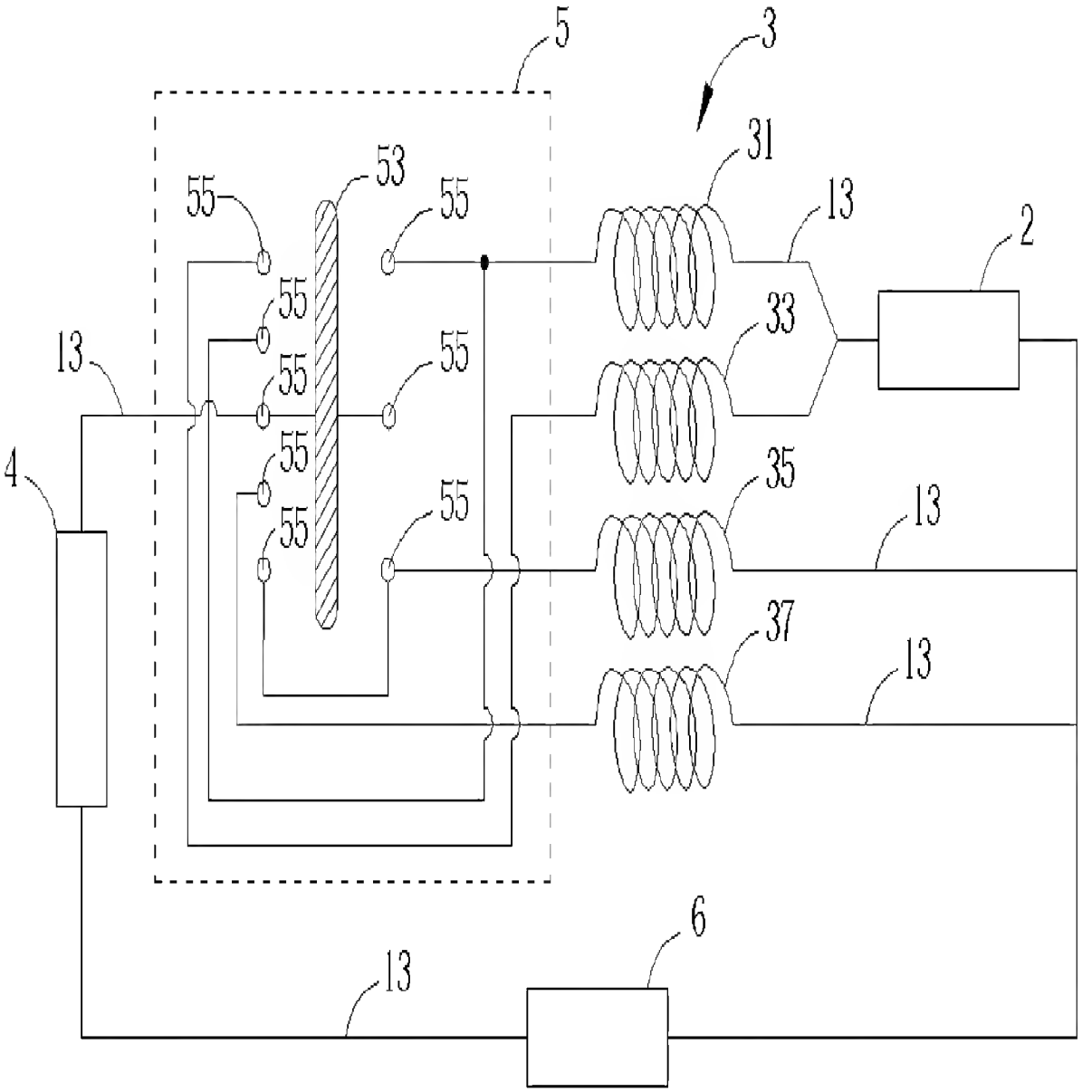

Fig. 6

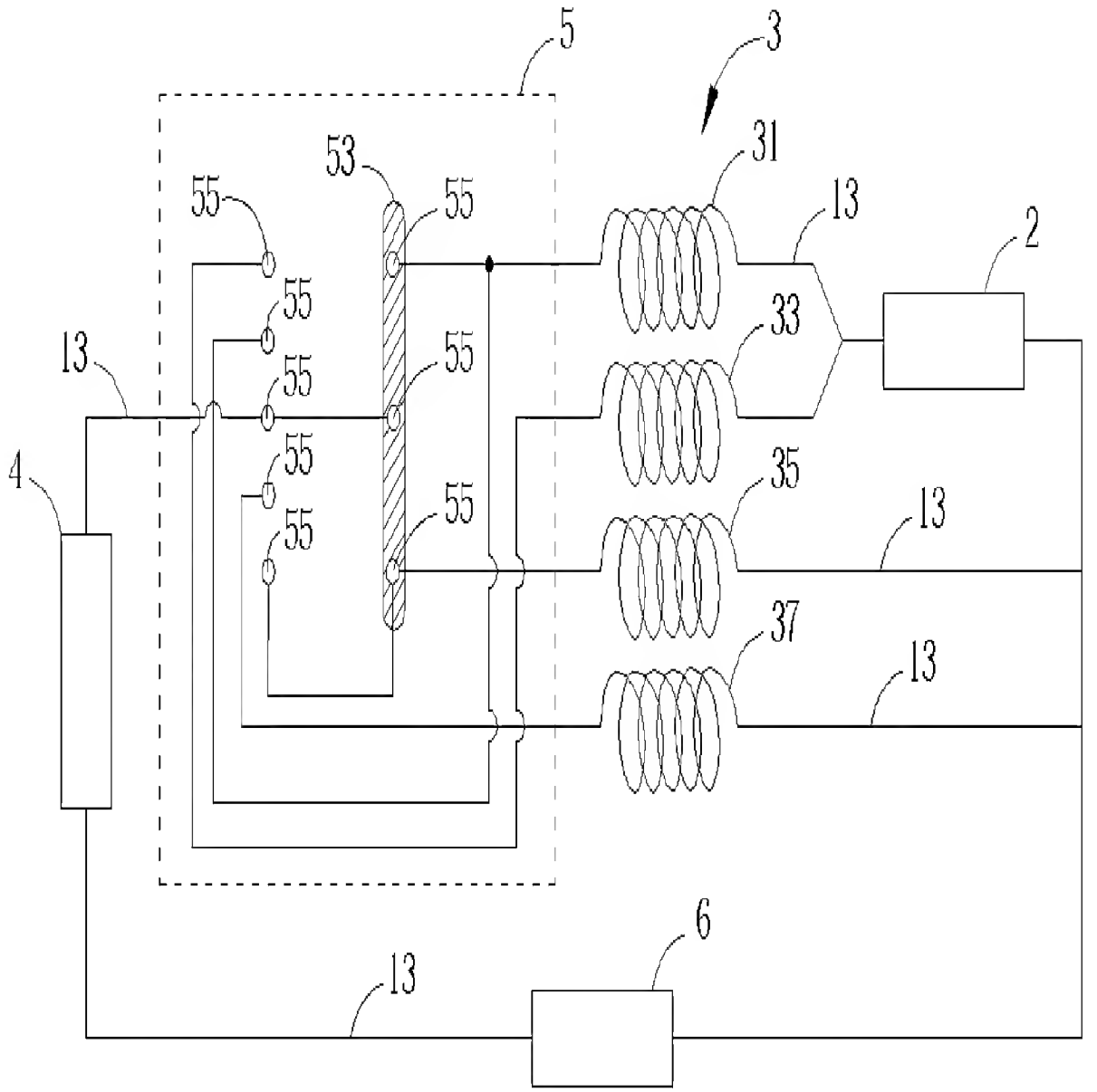

Fig. 7

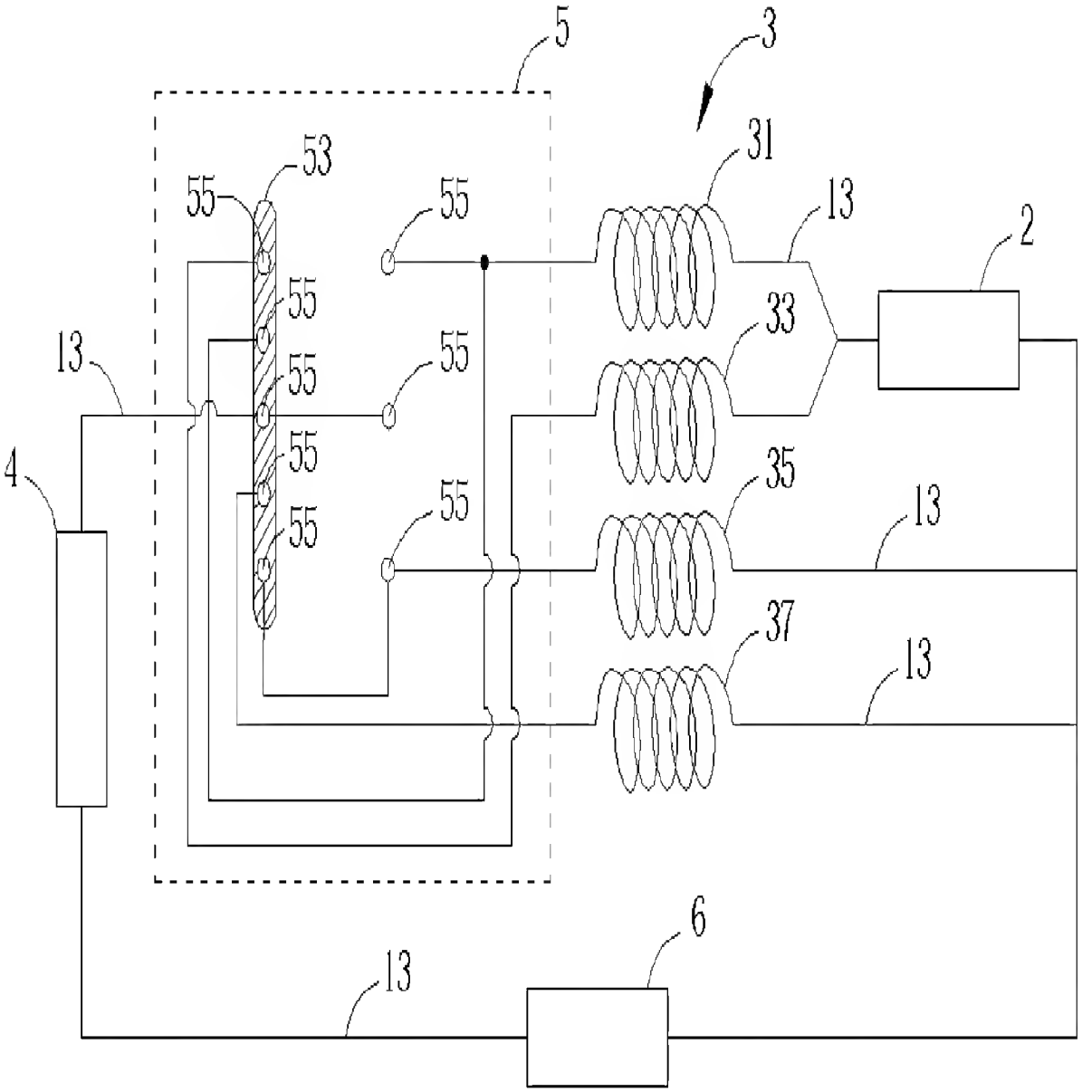

Fig. 8

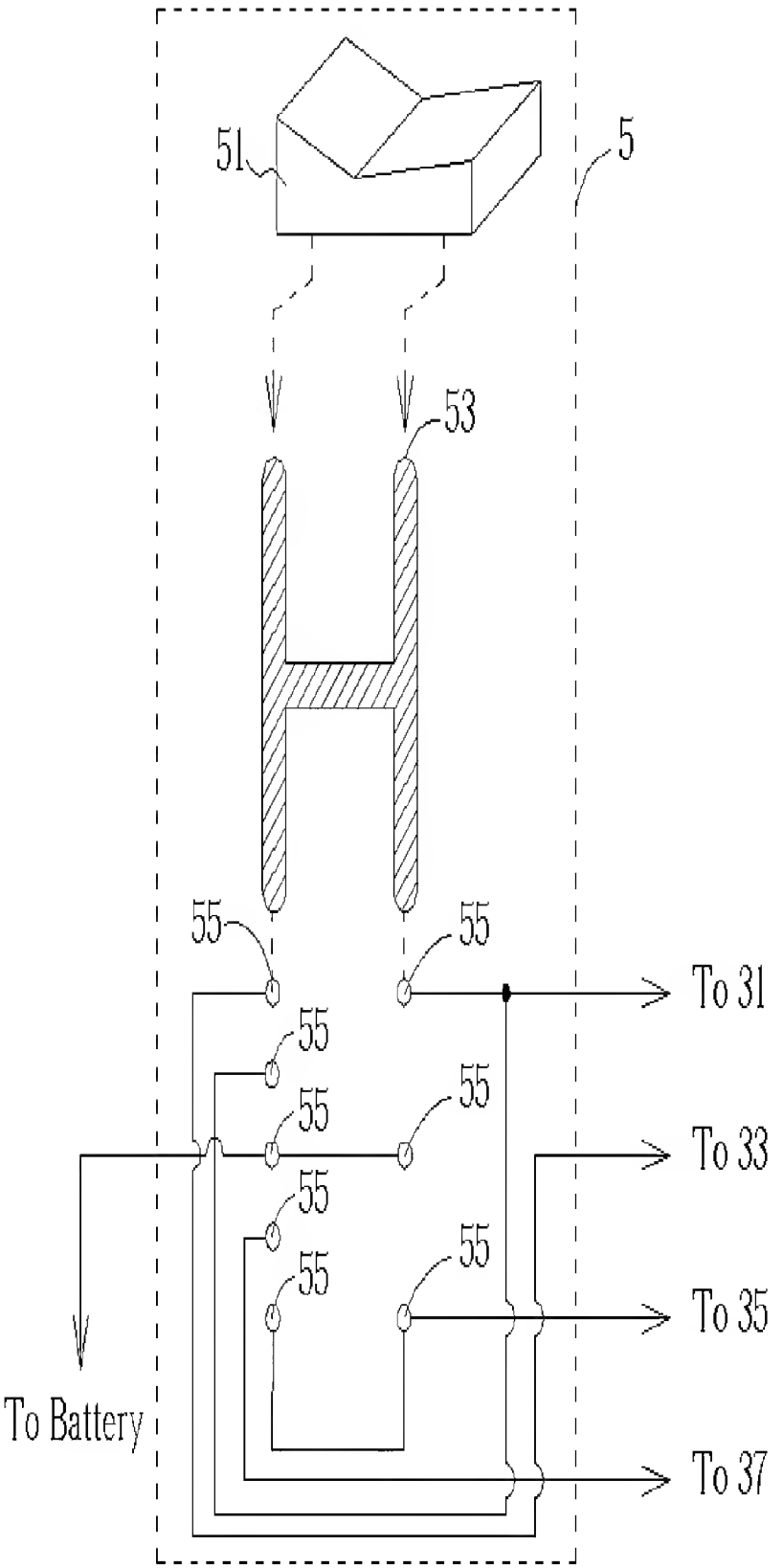
51
5
53
55
55
55
55
55
55
55
55
55
55
To 31
To 33
To 35
To 37
To Battery

Fig. 9

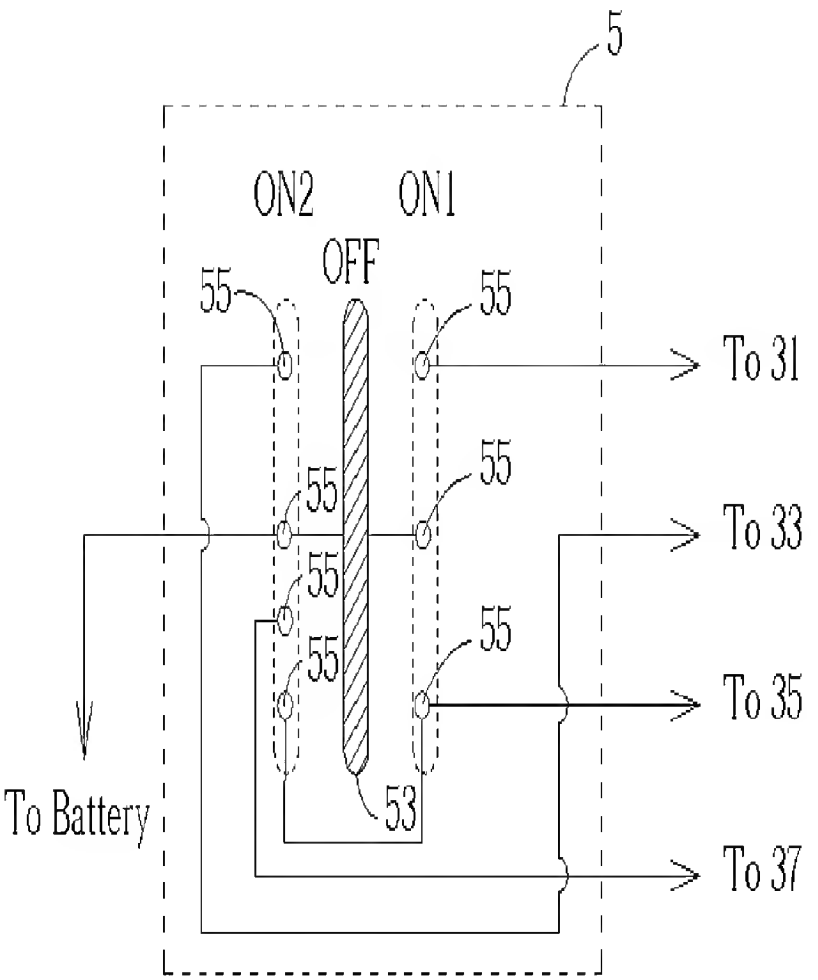
5
ON2
ON1
OFF
55
55
55
55
55
55
55
To 31
To 33
To 35
To 37
To Battery
53

Fig. 10

Type II

(II -1)	R_M	R_1	R_3	Total
Resistance Ω =	4.00	4.00	1.00	0.89
Current DC I =	2.00	2.00	16.00	18.00
Voltage DC V =	8.00	8.00	16.00	16.00
Power DC W =	16.00	16.00	256.00	288.00

(II -2)	R_M	R_2	R_3	R_4	Total
Resistance Ω' =	4.00	1.67	1.00	1.00	0.46
Current DC I' =	2.82	2.82	16.00	16.00	34.82
Voltage DC V' =	11.29	4.71	16.00	16.00	16.00
Power DC W' =	32.00	13.28	256.00	256.00	557.28

$W'_M / W_M = 32.00/16.00 = 2$

$W'_{Total} / W_{Total} = 557.28/288.00 = 1.94$

Fig. 11

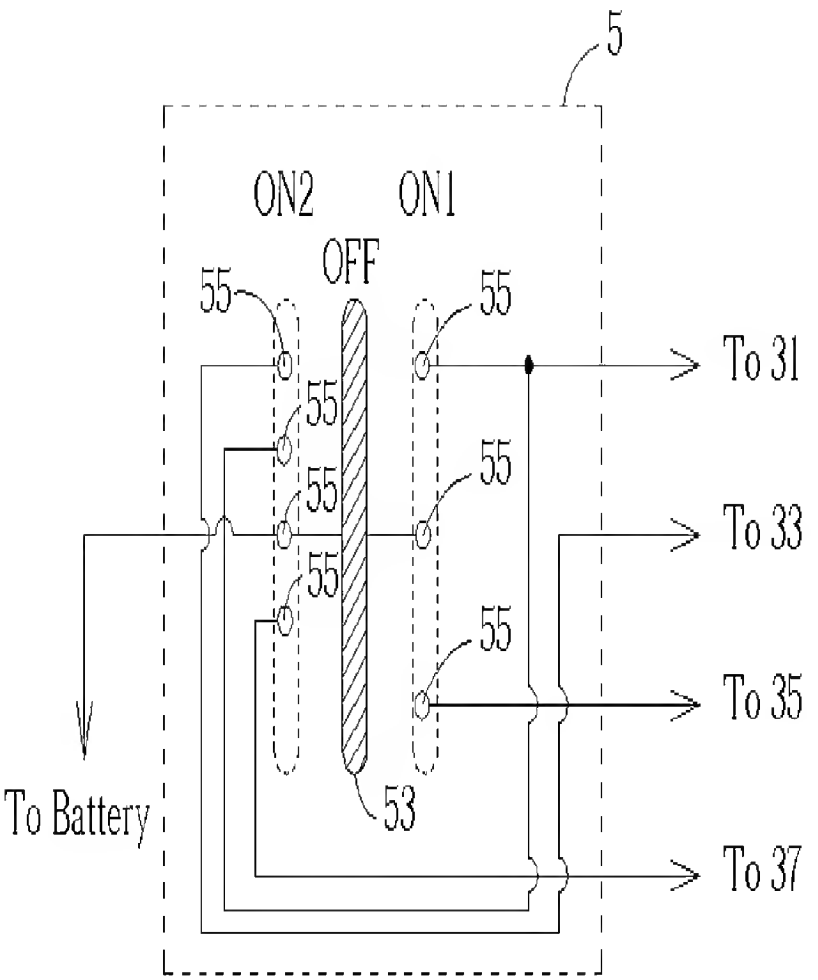
5
ON2
ON1
OFF
55
55
55
55
55
55
55
To 31
To 33
To 35
To 37
To Battery
53

Fig. 12

Type III

(III-1)	R_M	R_1	R_3	Total
Resistance Ω =	4.00	4.00	1.00	0.89
Current DC I =	2.00	2.00	16.00	18.00
Voltage DC V =	8.00	8.00	16.00	16.00
Power DC W =	16.00	16.00	256.00	288.00

(III-2)	R_M	R_1	R_2	R_4	Total
Resistance Ω' =	4.00	4.00	2.86	0.50	0.46
Current DC I' =	2.82	1.18	1.64	32.00	34.82
Voltage DC V' =	11.29	4.71	4.71	16.00	16.00
Power DC W' =	32.00	5.55	7.76	512.00	557.31

$W'_M / W_M = 32.00/16.00 = 2$

$W'_{Total} / W_{Total} = 557.31/288.00 = 1.94$

Fig. 13

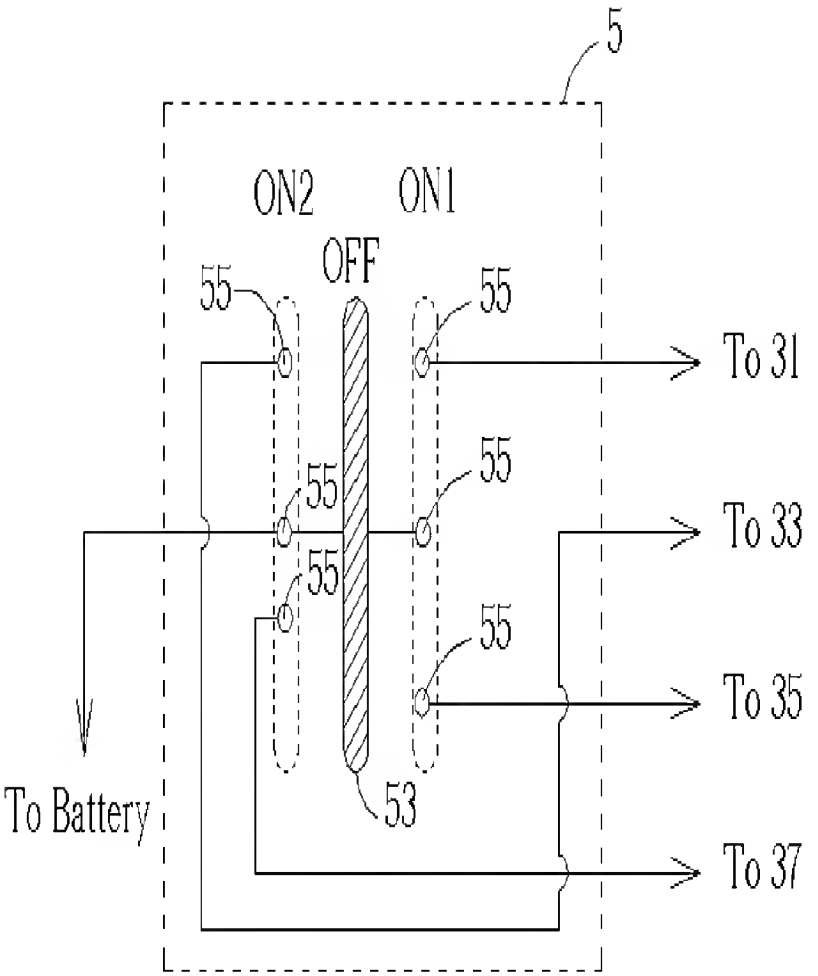

Fig. 14

Type IV

(IV-1)	R_M	R_1	R_3	Total
Resistance Ω =	4.00	4.00	1.00	0.89
Current DC I =	2.00	2.00	16.00	18.00
Voltage DC V =	8.00	8.00	16.00	16.00
Power DC W =	16.00	16.00	256.00	288.00

(IV-2)	R_M	R_2	R_4	Total
Resistance Ω' =	4.00	1.67	0.50	0.46
Current DC I' =	2.82	2.82	32.00	34.82
Voltage DC V' =	11.29	4.71	16.00	16.00
Power DC W' =	32.00	13.28	512.00	557.28

$W'_M / W_M = 32.00/16.00 = 2$

$W'_{Total} / W_{Total} = 557.28/288.00 = 1.94$

Fig. 15